

DFW

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

D.J. Biswas et al.

Confirmation No.: 6897

Application No.: 10/612,848

Art Unit: 2828

Filed: July 3, 2003

Examiner: Rodriguez, Armando

For: A PULSER DRIVEN, HELIUM FREE TRANSVERSELY EXCITED  
ATMOSPHERIC-PRESSURE (TEA) CO<sub>2</sub> LASER

Attorney Docket No.: 3875.023

Customer No.: 000041288

**INFORMATION DISCLOSURE STATEMENT  
UNDER 37 C.F.R. §1.97 and §1.98**

**Mail Stop Amendment**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure under 37 C.F.R. §1.56, Applicants hereby notify the U.S. Patent and Trademark Office of the following documents listed in the specification for the above-identified application. Except for copies of documents corresponding to U.S. Patents and U.S. Patent Applications, copies of the documents set forth below and listed on the attached Form PTO/SB/08 are provided herewith.

1. P.E. Dyer and B.L. Tait, Improved Performance of Mini-repetitively Pulsed CO<sub>2</sub> Lasers Using H<sub>2</sub> Buffered Gas Mixtures, Appl. Phys. Lett., 41(6):506-508 (1982).

U.S. PATENT APPLICATION NO.: 10/612,848  
INFORMATION DISCLOSURE STATEMENT

ATTY DOCKET: 3875.023

2. P.E. Dyer and B.L. Tait, Miniature 250 Hz, TEA CO<sub>2</sub> Laser Using H<sub>2</sub> Buffered Gas Mixture, J. Phys. E: Sci. Instrum., 16:467-469 (1983).
3. M. Trtica et al., Short Delay Time UV Preionized TEA CO<sub>2</sub> Laser Operating with Binary CO<sub>2</sub>/H<sub>2</sub> and CO<sub>2</sub>/He Gas Mixtures, Opt. Quant. Electron., 16:511-516 (1984).
4. S. Marchetti et al., High Power, Helium Free, Supercritical CO<sub>2</sub> Mini-TEA Laser, J. de Physique, 48:C7-51 to C7-53 (1987).
5. U.S. Patent No. 4,264,868
6. D.J Biswas and J. Padma Nilaya, Repetitive Transversely Excited Gas Laser Pulsers, Prog. Quant. Electron. 26:1-63 (2002).
7. G.J. Ernst, Uniform-Field Electrodes with Minimum Width, Opt. Commun. 49:275-277 (1984).
8. A. Kumar et al., A Novel Method of Measuring the Delay Between Pre-Ionizing and Main Discharges in TE Gas Lasers, Meas. Sci. Technol. 12:1739-1742 (2001).

**Document 1**

Document 1 is in the English language.

U.S. PATENT APPLICATION NO.: 10/612,848  
INFORMATION DISCLOSURE STATEMENT

ATTY DOCKET: 3875.023

Document 2

Document 2 is in the English language.

Document 3

Document 3 is in the English language.

Document 4

Document 4 is in the English language.

Document 5

Document 5 is in the English language.

Document 6

Document 6 is in the English language.

Document 7

Document 7 is in the English language.

Document 8

Document 8 is in the English language.

The present Information Disclosure Statement is being filed after three months from the application's filing date and after the mailing date of the first Office Action on the merits, but before a final Office Action or Notice of Allowance (whichever is earlier) and, therefore, Applicants are concurrently submitting herewith a fee under 37 C.F.R. § 1.17(p).

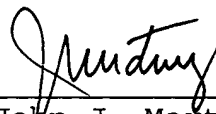
U.S. PATENT APPLICATION NO.: 10/612,848  
INFORMATION DISCLOSURE STATEMENT

ATTY DOCKET: 3875.023

The submission of the listed document is not intended as an admission that any such document constitutes prior art against the claims of the present application. Applicant does not waive any right to take any action that would be appropriate to antedated or otherwise remove any listed document as a competent reference against the claims of the present application.

Applicant respectfully requests that the listed documents be considered by the Examiner and be made of record in the present application and that an initialed copy of Form PTO-1449 be returned in accordance with MPEP §609.

Respectfully submitted,



---

John J. Martinez  
Reg. No. 48,254

Pendorf & Cutliff  
5111 Memorial Highway  
Tampa, Florida 33634-7356  
(813)886-6085  
Dated: **April 4, 2005**

**Enclosures:** Copy of documents 1 -4 and 6-8.

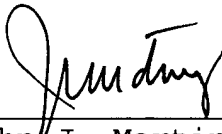
U.S. PATENT APPLICATION NO.: 10/612,848  
INFORMATION DISCLOSURE STATEMENT

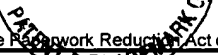
ATTY DOCKET: 3875.023

**CERTIFICATE OF MAILING AND AUTHORIZATION TO CHARGE**

I hereby certify that the foregoing **INFORMATION DISCLOSURE STATEMENT** Form PTO/SB/08A, including seven (7) documents, for U.S. Application No. 10/612,848 filed July 3, 2003, were deposited in first class U.S. mail, with sufficient postage, addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on **April 4, 2005**.

The Commissioner is hereby authorized to charge any additional fees which may be required at any time during the prosecution of this application without specific authorization, or credit any overpayment, to Deposit Account No. 16-0877.

  
\_\_\_\_\_  
John J. Martinez



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

**(Use as many sheets as necessary)**

Sheet	1
-------	---

of	2
----	---

**Complete if Known**

Application Number	10/612,848
Filing Date	July 3, 2003
First Named Inventor	D.J. Biswas
Art Unit	2828
Examiner Name	Rodriguez, Armando
Attorney Docket Number	3875,023

## U. S. PATENT DOCUMENTS

[illegible]

## FOREIGN PATENT DOCUMENTS

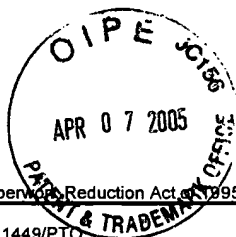
[illegible]

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

*If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.*



PTO/SB/08B (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

**Complete if Known**

Application Number	10/612,848
Filing Date	July 3, 2003
First Named Inventor	D.J. Biswas
Art Unit	2828
Examiner Name	Rodriguez, Armando
Attorney Docket Number	3875.023

Sheet 2 of 2

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	1	1. P.E. Dyer and B.L. Tait, Improved Performance of Mini-repetitively Pulsed CO <sub>2</sub> Lasers Using H <sub>2</sub> Buffered Gas Mixtures, Appl. Phys. Lett., 41(6):506-508 (1982).	
	2	2. P.E. Dyer and B.L. Tait, Miniature 250 Hz, TEA CO <sub>2</sub> Laser Using H <sub>2</sub> Buffered Gas Mixture, J. Phys. E: Sci. Instrum., 16:467-469 (1983).	
	3	3. M. Trtica et al., Short Delay Time UV Preionized TEA CO <sub>2</sub> Laser Operating with Binary CO <sub>2</sub> /H <sub>2</sub> and CO <sub>2</sub> /He Gas Mixtures, Opt. Quant. Electron., 16:511-516 (1984).	
	4	4. S. Marchetti et al., High Power, Helium Free, Superatmospheric CO <sub>2</sub> Mini-TEA Laser, J. de Physique, 48:C7-51 to C7-53 (1987).	
	6	6. D.J Biswas and J. Padma Nilaya, Repetitive Transversely Excited Gas Laser Pulsers, Prog. Quant. Electron. 26:1-63 (2002).	
	7	7. G.J. Ernst, Uniform-Field Electrodes with Minimum Width, Opt. Commun. 49:275-277 (1984).	
	8	8. A. Kumar et al., A Novel Method of Measuring the Delay Between Pre-Ionizing and Main Discharges in TE Gas Lasers, Meas. Sci. Technol. 12:1739-1742 (2001).	

Examiner Signature	Date Considered
--------------------	-----------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.